



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/679,130	10/03/2003	Andrew T. Sultenfuss	016295.1436 (DC-05224)	2208
23640                      7590                      09/09/2011				
Baker Botts L.L.P.				
910 Louisiana Street, One Shell Plaza				
HOUSTON, TX 77002				
EXAMINER				
MOORE JR, MICHAEL J				
ART UNIT		PAPER NUMBER		
2467				
NOTIFICATION DATE		DELIVERY MODE		
09/09/2011		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

crystle.garbade@bakerbotts.com  
tracy.perez@bakerbotts.com  
nicci.fowler@bakerbotts.com

**Advisory Action  
Before the Filing of an Appeal Brief**

**Application No.**

10/679,130

**Applicant(s)**

SULTENFUSS ET AL.

**Examiner**

MICHAEL J. MOORE, JR.

**Art Unit**

2467

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 25 August 2011 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
b) ☒ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(g).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_  
Claim(s) objected to: \_\_\_\_\_  
Claim(s) rejected: 1-15, 19 and 20.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Michael J. Moore, Jr./  
Primary Examiner, Art Unit 2467

Continuation of 11, does NOT place the application in condition for allowance because:

Regarding claims 1, 9, and 19, Applicant argues that Hinson, Willer, and Jiang fail to disclose "the inductive devices selected and coupled to the board-mounted transmission lines to offset at least one electrical characteristic of the communication switch such that one or more electrical characteristics of selected board-mounted transmission lines may be tuned to substantially approximate one or more electrical characteristics required by a communication protocol on an external network" as recited in claim 1, "the inductive devices selected and positioned to offset an electrical characteristic of the Ethernet switch such that an impedance measure from the Ethernet physical layer transceiver to an external Ethernet network connection on the circuit board substantially matches an impedance measure required by a communication protocol on the external Ethernet network" as recited in claim 9, and "at least one of the four pairs of board-mounted transmission lines having included on each board-mounted transmission line an inductive device serially coupled thereto, selection and placement of the inductive devices to offset an electrical characteristic of the electronic switch such that substantial impedance matching is achieved with a communication protocol on a communication network to be connected to the information handling system" as recited in claim 19.

Applicant further argues that the impedance matching circuits of Jiang are composed of resistive elements rather than inductive elements and that Jiang teaches the use of inductors in frequency compensating circuits and that due to these teachings Jiang fails to teach inductive devices selected to offset at least one electrical characteristic of a communication switch, an Ethernet switch, or an electronic switch.

However, while Jiang teaches the use of impedance matching circuits containing resistive elements to reduce or prevent the reflection of signals (electrical characteristic) on transmission lines received from an Ethernet switch via Ethernet interfaces as spoken of on column 3, lines 43-60, Willer was cited to teach the concept of using inductive elements for impedance matching purposes. As provided in the Final Office Action, Willer teaches where a plurality of inductive devices are coupled to telephony wire lines and where inductors are selected to insure that the impedance encountered by the two wire bus lines 20c and 20d match the input impedance of the analog terminal ends 19 in order to minimize capacitance and reflections as spoken of on column 5, lines 50-64.

It is maintained that at the time of the invention, it would have been obvious to someone of ordinary skill in the art, given these references, to apply the impedance matching of Ethernet communication of Jiang to the system of Hinson via the use of inductive devices as taught in Willer (rather than or in combination with the resistive elements of Jiang) in order to prevent adverse electrical effects that damage communication via transmission lines of a network as spoken of on column 2, lines 16-34 of Willer. As is well known in the art, resistors, capacitors, and/or inductors are circuit elements that may be used for generation of an impedance containing resistive and/or reactive components.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).